## **ABSTRACT OF THE DISCLOSURE**

An optical waveguide has a core layer made by a film containing a cross-linked polyamide based on a repeating unit of general formula (I) and a method for the production thereof.

$$* \underbrace{\begin{array}{c} R_4 \\ N \\ R_5 \end{array}}_{R_6} \underbrace{\begin{array}{c} R_9 \\ R_7 \\ R_8 \end{array}}_{R_8} \underbrace{\begin{array}{c} R_1 \\ CH_2)_x \\ CH_3 \end{array}}_{R_3} \underbrace{\begin{array}{c} R_2 \\ R_3 \\ (I) \end{array}}_{R_1}$$